

To: John Weihrach/DC/USEPA/US@EPA; Jeff Kodish/R8/USEPA/US@EPA; Paul
Argyropoulos/DC/USEPA/US@EPA[]; eff Kodish/R8/USEPA/US@EPA; Paul
Argyropoulos/DC/USEPA/US@EPA[]; aul Argyropoulos/DC/USEPA/US@EPA[]
From: Larry Schafer
Sent: Wed 1/9/2013 11:34:04 AM
Subject: fyi ... comparison of EMTS, NBB, EIA 22M data - NBB 2012 data revised
Biodiesel Production Estimates (NBB and Feds) 2006 to 2012.xlsx

FYI ...

Under all three tracking scenarios ... the industry will likely produce more than 1.0 billion gallons this year
...

Larry Schafer
National Biodiesel Board

(b) (6)

Biodiesel - America's Advanced Biofuel!
www.americasadvancedbiofuel.com

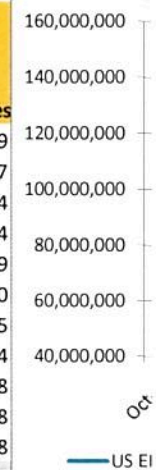
1331 Pennsylvania Ave. NW
Suite 505
Washington DC 20004

-----Original Message-----

From: J. Alan Weber (b) (6)
Sent: Monday, January 07, 2013 10:52 AM
To: Larry Schafer; April Yaeger
Cc: Joe Jobe
Subject: comparison of EMTS, NBB, EIA 22M data - NBB 2012 data revised

	US Census m311k	US EPA EMTS	US DOE Monthly Energy Review	US DOE 22M Survey	NBB Estimates
Jan-06	7,381,467		13,093,000		
Feb-06	8,639,333		11,317,000		
Mar-06	13,917,600		15,437,000		
Apr-06	12,837,333		16,186,000		
May-06	19,110,000		22,302,000		
Jun-06	18,851,733		25,700,000		
Jul-06	18,863,867		22,676,000		
Aug-06	24,832,000		28,918,000		
Sep-06	20,963,867		25,131,000		
Oct-06	19,660,533		23,037,000		
Nov-06	18,334,933		21,858,000		
Dec-06	20,429,067		24,785,000		
2006	203,821,733		250,439,000		281,438,028
Jan-07	26,871,892		29,085,000		
Feb-07	24,142,067		23,701,000		
Mar-07	32,271,742		32,544,000		
Apr-07	32,368,033		32,125,000		
May-07	40,923,992		40,240,000		
Jun-07	39,650,067		39,590,000		
Jul-07	52,781,158		51,964,000		
Aug-07	62,405,983		54,510,000		
Sep-07	50,178,033		51,394,000		
Oct-07	49,377,067		49,888,000		
Nov-07	44,030,683		41,701,000		
Dec-07	44,891,542		43,084,000		
2007	499,892,258		489,825,000		553,262,197
Jan-08	51,646,292		50,270,000		
Feb-08	43,932,850		45,105,000		
Mar-08	49,817,567		49,882,000		
Apr-08	53,537,217		53,276,000		
May-08	53,122,842		54,270,000		
Jun-08	64,001,833		60,681,000		
Jul-08	68,119,900		67,366,000		
Aug-08	67,475,483		68,155,000		
Sep-08	64,810,892		63,024,000		
Oct-08	62,655,883		61,515,000		

	US EPA EMTS	US DOE 22M Survey	NBB Estimates
Oct-11	115,119,761	105,000,000	106,550,269
Nov-11	107,147,638	105,000,000	109,525,907
Dec-11	153,833,553	109,000,000	114,941,454
Jan-12	60,141,041	71,000,000	69,853,014
Feb-12	73,646,295	77,000,000	72,941,619
Mar-12	102,495,818	92,000,000	94,393,240
Apr-12	93,449,345	92,000,000	90,536,615
May-12	114,769,815	100,000,000	102,288,924
Jun-12	111,977,436	91,000,000	91,274,328
Jul-12	103,021,458	87,000,000	86,054,898
Aug-12	97,779,340		90,217,238
Sep-12			
Oct-12			
Nov-12			
Dec-12			



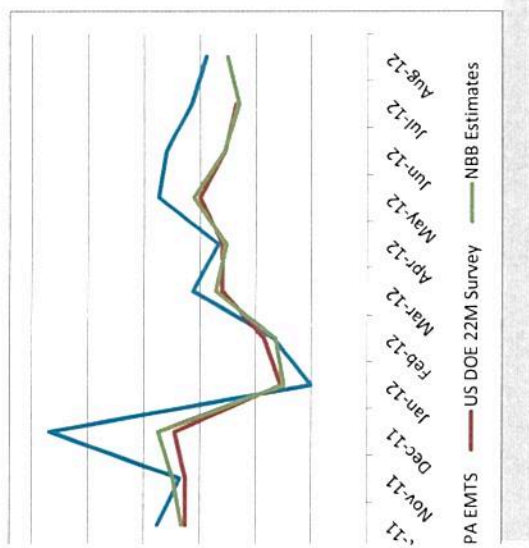
FD-000314-NSF 0000161

Nov-08	63,086,100		60,395,000		
Dec-08	49,133,275		44,168,000		
2008	691,340,133		678,106,000	805,836,287	
Jan-09	33,860,725		42,473,000	42,000,000	
Feb-09	36,002,483		32,771,000	33,000,000	
Mar-09	32,544,117		25,158,000	27,000,000	
Apr-09	38,561,758		26,201,000	28,000,000	
May-09	39,378,958		28,950,000	32,000,000	
Jun-09	38,028,492		31,979,000	34,000,000	
Jul-09	46,130,267		43,251,000	43,000,000	
Aug-09	51,347,825		44,944,000	45,000,000	
Sep-09	47,643,108		48,633,000	49,000,000	
Oct-09	54,930,533		57,306,000	57,000,000	
Nov-09	65,784,383		63,480,000	64,000,000	
Dec-09	61,058,742		61,130,000	61,000,000	
2009	545,271,392		506,275,000	516,000,000	531,847,155
Jan-10	32,005,314		26,180,000	27,000,000	
Feb-10	33,449,019		27,440,000	29,000,000	
Mar-10	34,209,142		33,840,000	34,000,000	
Apr-10	31,009,998		35,867,000	34,000,000	
May-10	28,784,928		31,624,000	32,000,000	
Jun-10	23,215,251		25,443,000	27,000,000	
Jul-10	28,094,661		28,245,000	28,000,000	
Aug-10	22,842,256		22,787,000	27,000,000	
Sep-10	23,374,519		23,681,000	30,000,000	
Oct-10	21,044,432		20,889,000	28,000,000	
Nov-10	15,861,207		16,173,000	22,000,000	
Dec-10	18,076,139		17,194,000	25,000,000	
2010	311,966,866		309,362,000	343,000,000	341,366,466
Jan-11	31,086,992	35,956,654	31,086,000	35,000,000	
Feb-11	30,146,337	41,322,090	30,165,000	40,000,000	
Mar-11	51,153,902	67,260,369	51,241,000	60,000,000	135,401,318 Q data
Apr-11	60,474,094	71,092,037	60,563,000	71,000,000	
May-11	58,822,071	79,254,986	59,818,000	77,000,000	
Jun-11	65,884,724	81,449,689	65,602,000	81,000,000	228,513,733 Q data
Jul-11	78,764,734	90,935,495	78,393,000	92,000,000	
Aug-11		105,559,339	95,000,000	95,000,000	
Sep-11		117,560,631	93,000,000	96,000,000	282,156,767 Q data
Oct-11		115,119,761	96,902,000	105,000,000	106,550,269
Nov-11		107,147,638	96,605,000	105,000,000	109,525,907

FD-1000314-NSF-00000161

Dec-11	153,833,553	103,018,000	109,000,000	114,941,454	
2011	1,066,492,243	861,393,000	967,000,000	977,089,448	981,998,265 (including non-members)
Jan-12	58,993,787		71,000,000	70,725,474	
Feb-12	72,241,415		77,000,000	75,994,281	
Mar-12	100,540,603		92,000,000	96,145,684	
Apr-12	91,666,701		92,000,000	93,102,091	
May-12	112,580,461		100,000,000	109,663,882	
Jun-12	109,841,344		91,000,000	95,385,078	
Jul-12	100,997,947		87,000,000	89,534,844	
Aug-12	97,185,520		90,000,000	93,830,128	
Sep-12	89,896,175		81,000,000	83,800,795	
Oct-12	91,383,444		75,000,000	72,567,984	
Nov-12				61,516,261	
Dec-12					
2012	925,327,397	0	856,000,000	942,266,502	

FD-000314-NSF-00000161



To: Paul Argyropoulos/DC/USEPA/US@EPA[]
From: Brooke Coleman
Sent: Wed 1/16/2013 4:24:59 PM
Subject: FW: ZeaChem/wood
Wood Pathway Overview ZeaChem 010313 v2.docx

Fyi.

-----Original Message-----

From: Brooke Coleman
Sent: Wednesday, January 16, 2013 11:24 AM
To: 'Grundler.Christopher@epamail.epa.gov'
Cc: Simon.Karl@epamail.epa.gov
Subject: RE: ZeaChem/wood

Thanks for the quick reply and suggestion. I think maybe as a primer I will send along the memo. It is attached and details (high level) ZeaChem's state of mind on the issue.

-----Original Message-----

From: Grundler.Christopher@epamail.epa.gov [mailto:Grundler.Christopher@epamail.epa.gov]
Sent: Tuesday, January 15, 2013 8:00 PM
To: Brooke Coleman
Cc: Simon.Karl@epamail.epa.gov
Subject: Re: ZeaChem/wood

Hi Brooke,

I suggest you give Karl Simon a call on where we stand and what the outlook is. I have not been briefed on this yet as our team is still working with USDA on the issue. As you know it is challenging

Christopher Grundler
Director
Office of Transportation and Air Quality
202.564.1682 (Washington)
734.214.4207 (Ann Arbor)

-----Brooke Coleman (b) (6)-----

=====

To: Christopher Grundler/AA/USEPA/IJS@EPA
From: Brooke Coleman <(b) (6)>
Date: 01/15/2013 10:26AM
Subject: ZeaChem/wood

=====

Hey Chris,

Hope this email finds you well. Now that you are probably adequately drowning in RFS administration (if not everything else), I wanted to pick up where we left off on wood pathways and ZeaChem. ZeaChem is the company we discussed that has been working with EPA since early 2010 on a wood pathway (with

nothing to show for it yet, and pressing financing deadlines). They have prepared a short memo covering the issue that I think would be a good starting point. I can connect you with them directly. Please let me know how you would like to proceed on this. Happy to forward the memo if you would like. Thanks, -Brooke

R. Brooke Coleman

Executive Director

Advanced Ethanol Council (AEC)

www.AdvancedEthanol.org<<http://www.advancedethanol.org/>>

(b) (6)

Recommendation: ZeaChem recommends that EPA separate woody biomass into 2 or more pathway proposals and strategically prioritize wood species according to available data and status of biofuels projects (production, construction, development, etc.), with tree and tree residues from poplar tree plantations being the first pathway proposed.

Background: ZeaChem is a producer of advanced biofuels and bio-based chemicals from cellulosic feedstocks. Its 250,000 gallons per year (GPY) demonstration biorefinery is located in Boardman, Oregon at the Port of Morrow. Commissioning is currently underway for the production of cellulosic ethanol and the facility will also produce bio-based chemicals. While ZeaChem's technology is feedstock flexible, the primary feedstock utilized at the plant is woody biomass, specifically poplar trees from GreenWood Resources' (GWR) nearby poplar tree plantation.¹ Biomass from the tree plantation includes slash, pre-commercial thinnings, tree residues, and trees. In addition, agriculture residues such as wheat straw and corn stover will be processed at the facility. The demonstration facility is supported by a \$25MM U.S. DOE cooperative agreement. In addition, the USDA is supporting ZeaChem's commercial efforts through a conditional \$232.5MM loan guarantee, as well as feedstock development and expansion efforts with a \$17MM Biomass Crop Assistance Program (BCAP) award to GWR for the purpose of planting poplar trees on an intercropped coppice basis.

EPA RIN Pathway Status: The pathway for utilization of agriculture residues was approved early in the process. In addition, pathway approval has been provided for woody biomass from pre-commercial thinnings and slash from non-federal forests including tree plantations. These pathways provide ZeaChem with partial compliance mechanisms to enable RIN generation for some of the feedstocks utilized at the demonstration facility. What remains to be proposed and finalized is a pathway for woody biomass from trees and tree residues from tree plantations. The demonstration facility will be starting ethanol production on wood chips from trees and tree residues from the GWR tree plantation and the majority of ZeaChem's biofuel production will come from this feedstock resource. This resource is also the primary feedstock for ZeaChem's 25MM GPY commercial biorefinery which is currently in development adjacent to the demonstration facility in Boardman. Approval of this pathway is critical to the financial viability of the project.

Over the past 3+ years, ZeaChem has coordinated closely with EPA staff working to implement the RFS as the company progresses toward production of cellulosic ethanol. ZeaChem has provided a comprehensive GREET analysis specific to its process utilizing poplar trees and tree residues and has had numerous in-person meetings, phone calls, and email correspondence to

¹ GreenWood Resources poplar plantation in Boardman meets the definition of a 'tree plantation' provided in 40 C.F.R. § 80.1401.

assist this process. To date, ZeaChem has not petitioned the EPA about this pathway directly since the final RFS rulemaking in February 2010 specifically stated that EPA had identified four additional pathways to be finalized, including biofuels from wood.²

Next steps: ZeaChem is eager to generate RINs from its demonstration facility production volumes in 2013. Given the lack of a pathway for woody biomass from trees and tree residues from tree plantations at this time, only a small fraction of total production will be able to generate RINs through the existing pathways for agriculture residues and woody biomass from pre-commercial thinnings and slash. To continue coordinating this new pathway effort with EPA, ZeaChem intends to pursue the following steps:

1. ZeaChem will submit a registration document to EPA for the generation of RINs utilizing existing pathways for production volumes from the demonstration facility which are soon to begin. When EPA finalizes a pathway for woody biomass from trees and tree residues from tree plantations pathway, ZeaChem will amend its registration document to appropriately account for all the feedstocks utilized for biofuels production.
2. ZeaChem will submit a petition to EPA for a pathway for woody biomass from trees and tree residues from poplar tree plantations. ZeaChem understands that wood is a complex biomass resource, which has created part of the delay in proposing a comprehensive pathway. Therefore, ZeaChem recommends that EPA separate woody biomass into two or more pathway proposals and strategically prioritize wood species according to available data and status of biofuels projects (production, construction, development, etc.), with tree and tree residues from poplar tree plantations being the first pathway proposed. Significant tree plantation management data is available with respect to these species of trees including planting approaches, growth rates, harvesting techniques and transportation arrangements. Recently, Argonne National Laboratory updated the GREET model specific to poplar tree plantations.³ These trees have been purposefully planted to be cut down and harvested for the production of pulp and paper and lumber and does not cause any direct land use changes as these plantations were established on land cleared prior to December 19, 2007. Conversion of these species harvested from tree plantations into biofuels at volumes consistent with RFS targets does not cause any indirect land use changes either as their use does not represent a new or alternative demand pull but rather represents a replacement demand pull for the declining pulp and paper demand.

ZeaChem looks forward to continue working closely with EPA on this important issue so that as many RINs as possible can be generated to enable the success of the RFS.

² <http://www.epa.gov/oms/fuels/renewablefuels/compliancehelp/rfs2-aq.htm#3>

³ <http://www.greencarcongress.com/2012/12/greet-20121222.html>

To: Argyropoulos, Paul[Argyropoulos.Paul@epa.gov]
From: Michael.McAdams@[REDACTED]
Sent: Mon 5/4/2015 3:25:39 PM
Subject: and the music goes on.
MAIL_RECEIVED: Mon 5/4/2015 3:25:46 PM

I have spent the last two days working with Sandra and Michael and others. And I simply do not see the numbers these folks are talking about in the press. And really you want to take a shot at the guy who just left the White House, What the hell are you thinking? Hope you are well.

Michael J. McAdams | Holland & Knight

President, ABFA

Senior Policy Advisor

800 17th Street, NW Suite 1100 | Washington DC 20006

Phone 202.469.5140 | Fax 202.955.5564

michael.mcadams@hklaw.com | www.hklaw.com

NOTE: This e-mail is from a law firm, Holland & Knight LLP ("H&K"), and is intended solely for the use of the individual(s) to whom it is addressed. If you believe you received this e-mail in error, please notify the sender immediately, delete the e-mail from your computer and do not copy or disclose it to anyone else. If you are not an existing client of H&K, do not construe anything in this e-mail to make you a client unless it contains a specific statement to that effect and do not disclose anything to H&K in reply that you expect it to hold in confidence. If you properly received this e-mail as a client, co-counsel or retained expert of H&K, you should maintain its contents in confidence in order to preserve the attorney-client or work product privilege that may be available to protect confidentiality.

FD-100313-0365-000 01034

To: Dave VanderGriend (b) (6)
Cc: tbuis@ (b) (6); William Charmley/OU=AA/O=USEPA/C=US@EPA;CN=Paul Machiele/OU=AA/O=USEPA/C=US@EPA;CN=Paul Argyropoulos/OU=DC/O=USEPA/C=US@EPA;CN=Karl Simon/OU=DC/O=USEPA/C=US@EPA[]; N=William Charmley/OU=AA/O=USEPA/C=US@EPA;CN=Paul Machiele/OU=AA/O=USEPA/C=US@EPA;CN=Paul Argyropoulos/OU=DC/O=USEPA/C=US@EPA;CN=Karl Simon/OU=DC/O=USEPA/C=US@EPA[]; N=Paul Machiele/OU=AA/O=USEPA/C=US@EPA;CN=Paul Argyropoulos/OU=DC/O=USEPA/C=US@EPA;CN=Karl Simon/OU=DC/O=USEPA/C=US@EPA[]; N=Paul Argyropoulos/OU=DC/O=USEPA/C=US@EPA;CN=Karl Simon/OU=DC/O=USEPA/C=US@EPA[]; N=Karl Simon/OU=DC/O=USEPA/C=US@EPA[]
From: CN=Christopher Grundler/OU=AA/O=USEPA/C=US
Sent: Thur 1/3/2013 7:32:47 PM
Subject: Re: FW: Follow-up email from Dave Vander Griend to Chris Grundler
MAIL_RECEIVED: Thur 1/3/2013 7:32:46 PM
[here](#)

Happy New Year Dave;

I apologize for the tardiness of my reply---your email got lost in the holiday rush.

I do think it would be a good idea to have an exchange of views on the current science and implications for future fuels. I suggest we try to meet in Ann Arbor where our Assessment and Standards Division is located. January is already pretty jammed, so I propose we shoot for February. Mondays and Fridays I try to be in my Ann Arbor Office so that would be my preference. Pls contact my Washington DC Office with times and days that work for you, then I will make sure my key team members are available and we can confirm

Chris

Christopher Grundler
Director
Office of Transportation and Air Quality
202.564.1682 (Washington)
734.214.4207 (Ann Arbor)

From: Dave VanderGriend (b) (6)
To: Christopher Grundler/AA/USEPA/US@EPA
Cc: Dave VanderGriend (b) (6)
Date: 12/22/2012 06:01 PM
Subject: FW: Follow-up email from Dave Vander Griend to Chris Grundler

Chris:

Thanks again for the opportunity to meet with you in October, and congratulations on your official appointment as OTAQ's Director. I know you've been busy with a number of RFS 2 waiver and pathway

rules, the GHG rule, and soot rule. I just returned from a lengthy business trip in Brazil where I observed that country's efforts growing its biofuels and agriculture industries. It confirmed for me the critical importance of our domestic ethanol industry and the opportunities for it to address numerous health and emissions issues.

I also firmly believe that mid-level blends of ethanol fuel provide the greatest opportunity for overall reduction of carbon in the transportation sector. I would like to continue our discussion we began during our Washington meeting, and share with you additional analysis and conclusions we've just recently completed on consumer fuels – including significant analysis of a comprehensive data set from Texas in both RFG and conventional fuel areas. It also has raised a question for us about Polycyclic Aromatic Hydrocarbons (PAHs) and whether we are interpreting EPA's rules correctly – it appears that Polycyclic Organic Matter (POM) is not being regulated although it is a key concern of gasoline emissions from our research. Our analysis included the following:

EPA's Phase II Complex Model states that five (5) toxins are to be regulated in gasoline formulation. The last listed is POM. Similar to concerns about benzene which resulted in its regulation, consumer fuel's propensity to produce PAHs which directly contribute to particulate formation (POMs) is causing concern within the medical community. Honda Motors and Southwest Research Institute have developed a Predictive Model Index (PMI) which identifies these gasoline components that may significantly increase particulate emissions. ICM and Urban Air Initiative have recently analyzed significant consumer fuels data from Texas within this model and confirmed this fundamental premise.

EPA regulates benzene due to the risk that incomplete combustion results in benzene emissions from exhaust being released into the environment. PAHs chemical composition increases this concern even further. Studies indicate that the creation of particulates begin with the formation of PAHs. The data indicates that a significant percentage of gasoline's makeup is already at the PAH pathway. We would like to understand why the EPA does not regulate POMs from gasoline when these various hydrocarbons have such an influence on the toxic emissions that result in health problems we see today.

If you would have the time to sit down with us for another discussion, I would greatly appreciate it. We'd be happy to meet you in Washington or Ann Arbor as your schedule permits. I think we are approaching another critical juncture in emissions regulation with the expected Tier 3 proposed rule under EPA's consideration, and having the opportunity to review these findings could help chart a course for cleaner fuels for years to come.

Thanks.

Dave Vander Griend

[Click here to report this email as spam.](#)

***** ATTACHMENT NOT DELIVERED *****

This Email message contained an attachment named
image001.jpg
which may be a computer program. This attached computer program could
contain a computer virus which could cause harm to EPA's computers,
network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced
into the EPA network. EPA is deleting all computer program attachments

sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****